

IN THE CLAIMS:

Please amend the claims to read as follows:

1. - 44. (canceled)

45. (new) A method for preparing an ester from a conjugated diene compound selected from the group consisting of myrcene, isoprene, and mixtures thereof, the method comprising:

providing a solution containing at least one alkanoic acid of the formula R_1CO_2H wherein R_1 is a C_1 to C_7 alkyl group and having a K_a relative to water of less than 10^{-4} ;

heating the solution to a temperature in excess of 100 °C; and

adding the conjugated diene compound to the solution to form a reaction mixture free of catalysts while maintaining said alkanoic acid in a molar concentration greater than that of the conjugated diene compound, to produce an ester derivative of the conjugated diene compound.

46. (new) The method of claim 45, wherein the conjugated diene compound is myrcene.

47. (new) The method of claim 45, wherein the conjugated diene compound is isoprene.

48. (new) The method of claim 47, wherein the alkanoic acid is acetic acid.

49. (new) The method of claim 45, wherein the conjugated diene compound is added to the liquid reaction mixture in a dropwise fashion.

50. (new) The method of claim 45, wherein the solution comprises a mixture of alkanoic acids.

51. (new) The method of claim 50, wherein the mixture of alkanoic acids includes acetic acid and the conjugated diene compound includes myrcene.

52. (new) The method of claim 51, wherein the mixture of alkanolic acids further includes an acid selected from the group consisting of butyric acid, isobutyric acid, and combinations thereof.

53. (new) The method of claim 52, wherein the solution further comprises a non-basic organic co-solvent selected from the group consisting of methylbenzene, butyl ether, chlorobenzene, 1,4-dimethylbenzene, methoxybenzene, cyclohexanone, butyl acetate and mixtures thereof.

54. (new) The method of claim 45, wherein the liquid solution further comprises a base having a formula $(R_2CO_2)M$ wherein R_2 is C_1 to C_7 alkyl, M is a group I cation and R_2 can be the same or different than R_1 .

55. (new) The method of claim 54, wherein the base is selected from the group consisting of sodium acetate, potassium acetate and sodium propionate.

56. (new) The method of claim 45, comprising conducting the reaction in a pressurized vessel.

57. (new) The method of claim 56, wherein the reaction mixture is maintained at a temperature in a range of about 115 °C to about 175 °C during and after the adding of the conjugated diene compound.

58. (new) The method of claim 57, wherein the temperature is in a range of about 135 °C to about 145 °C and the conjugated diene compound is myrcene.

59. (new) The method of claim 45, wherein R_1CO_2H is selected from the group consisting of acetic acid, propionic acid, butyric acid, isobutyric acid, isovaleric acid and mixtures thereof.

60. (new) The method of claim 45, wherein said solution further comprises a non-basic organic co-solvent.

61. (new) The method of claim 60, wherein the non-basic organic co-solvent is selected from the group consisting of ethyl acetate, isopropyl acetate, 2-butanone, methylbenzene and mixtures thereof.

62. (new) The method of claim 61, wherein the conjugated diene compound is isoprene.

63. (new) A method for preparing geranyl and neryl esters from myrcene, comprising:

providing a solution comprising

a mixture of alkanolic acids comprising acetic acid and a one or more additional alkanolic acids selected from the group consisting of propionic acid, butyric acid, isobutyric acid, isovaleric acid and mixtures thereof,

a non-basic organic co-solvent selected from the group consisting of methylbenzene, butyl ether, chlorobenzene, 1,4-dimethylbenzene, methoxybenzene, cyclohexanone, butyl acetate and mixtures thereof, and

a base selected from the group consisting of sodium acetate, potassium acetate, sodium propionate, and mixtures thereof;

heating the solution in a pressurized vessel to a temperature in excess of 100 °C; and

adding the myrcene to the alkanolic acids in a dropwise fashion to form a reaction mixture free of catalysts while maintaining said alkanolic acids in a molar concentration greater than that of the myrcene, to produce a geranyl ester/neryl ester mixture.

64. (new) A method for preparing a prenyl ester from isoprene, comprising:

providing a solution comprising

an alkanolic acid comprising acetic acid and optionally one or more additional alkanolic acids of the formula R_1CO_2H wherein R_1 is a C_1 to C_7 alkyl group and having a K_a relative to water of less than 10^{-4} ,

a non-basic organic co-solvent selected from the group consisting of methylbenzene, ethyl acetate, isopropyl acetate, 2-butanone, and mixtures thereof, and

a base selected from the group consisting of sodium acetate, potassium acetate, sodium propionate, and mixtures thereof;

heating the solution in a pressurized vessel to a temperature in excess of 100 °C; and

adding the isoprene to the alkanolic acid in a dropwise fashion to form a reaction mixture free of catalysts while maintaining said alkanolic acid in a molar concentration greater than that of the isoprene, to produce a prenyl ester.